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REMARKS

Claims 1-20 are presented. Claims 1, 18 and 19 are independent, and the rest are dependent. Claims 1-17 are resubmitted without amendment, since they are clearly patentable over the art relied upon for their rejection. Claims 18-20 are new claims and are also patentable, as indicated below.

Claims 1-5 and 7-16 are rejected under 35 U.S.C. §103 (a) as being unpatentable over Bohrer et al. (4,548,078) in view of Landis et al. (4,672,997). Claim 6 is rejected under 35 U.S.C. §103 (a) as being unpatentable over Bohrer in view of Araki (5,369,795).

Both rejections are respectfully traversed.

Independent claim 1 is drawn to a flow sensor comprising a housing with at least two housing sections and forming a measuring conduit between at least some of the housing sections. A semiconductor chip is provided comprising a sensor element arranged at a wall of the measuring conduit. A sealing ring is arranged between two of the housing sections and surrounding the semiconductor chip. The sealing ring presses against a support formed by at least one of the housing sections. The semiconductor chip is completely arranged within an area enclosed by the sealing ring. At least one strip conductor is connected to the semiconductor chip and extends from the semiconductor chip between the support and the sealing ring and out of the housing.

The Examiner substantially asserts that Bohrer et al. teach all the features of the

invention except for the sealing ring. He admits that the two housing sections of Bohrer et al. are glued or welded together. He further asserts that Landis et al. teach two housing portions sealed together using an "O-ring" and says that "it would have been obvious to a person having ordinary skill in the art... to provide a sealing ring such as an "O-ring" since it is notoriously well known to provide a sealing mechanism between two housing elements where a leakage is possible," and he further says that "to avoid leakage one having ordinary skill in the art would provide such 'O-rings' or any other sealing arrangements to prevent such leakage."

However, if one of ordinary skill would indeed place an O-ring between cover 15 and support 10 of Bohrer et al. as suggested by the Examiner, he would end up with a device where parts of the O-ring extend through the openings 18A and 18B, blocking them at least partially, thereby giving rise to undesired turbulent flow. In fact, the only place where the device of Bohrer et al. might need sealing are the two parallel lines where the legs of cover 15 meet support 10. Hence, it would, at best, be obvious for one skilled in the art to resort to what the Examiner calls "any other sealing arrangements to prevent such leakage," namely two parallel rubber strips or such placed between the legs of cover 15 and the support 10, but not an O-ring.

In addition, neither Landis et al. nor Bohrer et al. teach the provision of strip conductors passing between the support and the sealing ring. In Bohrer et al., as the Examiner mentions, the two housing sections are glued or welded to each other, which means that an originally liquid sealant has been hardened to form the seal. Such a sealant has, in its

liquid state, ample opportunity to tightly enclose the strip conductors, thereby sealing them tightly. In Landis et al., a wire extending through the wall of upper housing section 32 is used to connect the sensor to a connector 64.

In contrast to this, the applicant has found that it is possible to seal a strip conductor by means of a sealing ring. The state of the art does not suggest that a simple sealing ring would be suitable to seal a conductor in gas tight manner.

Finally, attention is drawn to the fact that Landis et al. do not teach placing the sensor elements at the wall of a measuring conduit *formed between two housing sections* as claimed. Rather, the sensor elements 42, 44 of Landis et al. are placed around separate tubes 46, 48.

Hence, neither Landis et al. nor Bohrer et al., alone or in combination, would make it obvious to build a device as claimed. Withdrawal of the rejection of claims 1-5 and 7-16 under 35 U.S.C. §103(a) is therefore respectfully requested.

The Araki patent is cited only for a teaching of a flexible support foil wherein strip conductors are arranged. However, claim 6, to which the Araki patent is applied, depends on claim 1. The Araki patent does nothing to address the deficiencies of the Bohrer et al. and Landis et al. patents as a disclosure or suggestion of the invention as defined in claim 1. Accordingly, withdrawal of the rejection of claim 6 under 35 U.S.C. §103(b) is respectfully requested.

As to claim 18, none of the cited documents shows a nose, as claimed in combination with a sealing ring. The device according to this claim uses the nose as part of the wall of the measuring conduit, which allows the measuring section of the chip to extend into the

measuring conduit while its contact pads remain accessible for the strip conductors.

However, the applicant has recognized that providing a tight sealing at the place of the nose is difficult and therefore provides a separate sealing ring around the semiconductor chip and the measuring conduit.

As to claim 19, it describes the connecting ducts 6 extending through the second housing section and both ending in a surface of the housing section opposite to the measuring conduit. This geometry, where both connecting ducts 6 end in the same lateral surface of the device, allows for conveniently attaching the device as a bypass to a larger tube, simply by placing the surface with the openings against corresponding openings of the larger tube. None of the cited prior art shows a similar design. In particular, it is noted that the ducts 78 and 80 of Fig. 3 of Landis et al. do not end in a surface opposite to a measuring conduit.

Withdrawal of the rejections and issuance of a notice of allowance are respectfully requested.

Since November 11, 2003 was a federal holiday, a response is due today, November 12, 2003. Accordingly, this response is being timely filed.

PATENT
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If a telephone interview would expedite the prosecution of the application, the
Examiner is requested to call undersigned counsel.

Respectfully submitted,
COOPER & DUNHAM LLP



Donald S. Dowden
Reg. No. 20,701

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